

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHRISTIAN MARZOLIN,
ARNAUD MARCHAL and
XAVIER TALPAERT

Appeal 2006-2738
Application 09/719,153
Technology Center 1700

Decided: October 31, 2006

Before PAK, KRATZ, and TIMM, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal from the final rejection of claims 1-11, 13-18, 20, and 21, the only claims pending in this application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

INTRODUCTION

The Examiner rejects all the appealed claims on the basis that they fail to comply with the written description requirement of 35 U.S.C. § 112, ¶ 1. Specifically, the Examiner states that “[t]he amendment to independent claims 1 and 13 ‘which is *comparable* to the mean size of crystallites of the at least partly crystallized titanium oxide in anatase form’ is not supported by the Specification.” (Answer 3).

In deciding the issues on appeal with respect to the rejection, we consider the issues as presented in the New Appeal Brief filed November 1, 2005 (Brief), the Answer mailed February 1, 2006 in so far as it relies upon the reasoning and evidence presented in the Final Office Action mailed February 25, 2005,¹ and the Reply Brief mailed April 3, 2006.

As no claims are argued separately, we select one claim to represent the issues on appeal. We select claim 1 which we reproduce below with the language at issue emphasized:

1. A substrate comprising:

a fibrous material; and

a photocatalytic semi-conducting material and an adhesion promoter for promoting adhesion of the photocatalytic semi-conducting material comprises titanium oxide which is at least partly crystallized in anatase form and the photocatalytic coating material

¹ We do not consider the evidence cited for the first time in the section of the Answer entitled “Evidence Relied Upon” (Answer § (8)). *See In re Hoch*, 428 F.2d 1341, 1342 n.3, 166 USPQ 406, 407 n.3 (CCPA 1970).

coats fibers in the portion of the fibrous material over a thickness of between 30 and 50 nm, *which is comparable to a mean size of crystallites of the at least partly crystallized titanium oxide in anatase form.*

We affirm for the reasons that follow.

OPINION

The Examiner's rejection is based upon the finding that the claim recites that the coating thickness is "*comparable to a mean size of crystallites of the at least partly crystallized titanium oxide*" while the Specification at page 10, lines 16-21 recites that "the most preferred thickness *takes into account* the most commonly encountered mean size of the anatase TiO₂ crystallites." (Answer 3, emphasis added). The Examiner finds that "the phrase 'takes into account' is a very broad limitation and does not necessarily require that the size is *comparable* to the mean size of the crystallites." (Answer 3-4). Further, as pointed out by the Examiner, "takes into account" only requires that some sort of relationship is established between the crystallite size and the coating thickness (Answer 4). On the other hand, "comparable" requires similarity or equivalence in size. The Examiner has established that there is a difference in concept and meaning between what is set forth in the claim and what is set forth in the Specification. From that difference in meaning it follows that the original Specification does not reasonably convey to one skilled in the art that Appellants had possession of the now claimed relationship between the coating thickness and the crystallite size. *See In re Kaslow*, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983) ("The test for determining

compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claim language.” (Citation omitted)).

Appellants argue that “the breath of the term ‘comparable’ is encompassed by the breath of the phrase ‘takes into account.’ Therefore, Claims 1 and 13 amended to recite the term ‘comparable’ have a scope encompassed by the scope of the disclosure found in the [S]pecification at page 10, lines 16-21.” (Br. 6; Reply Br. 4). The fact that “comparable” is narrower in meaning than “takes into account,” however, does not provide evidence that one of ordinary skill in the art would have understood the original disclosure as conveying that the thickness was “comparable” as claimed. A broader or generic disclosure does not provide support for a more specific claim limitation unless there are some blaze marks in the disclosure pointing to the more specific limitation. *Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1326, 56 USPQ2d 1481, 1486 (Fed. Cir. 2000). The relationships encompassed by “takes into account” are many and these words say nothing about how the crystallites are taken into account. Nor does the Specification provide any further explanation.

Appellants argue that there is support based upon recitations of agglomerated particle sizes in the Specification in the range of 20-80 nm and examples of particle sizes at 30 and 45 nm (Br. 5-6). According to Appellants, these particle sizes are comparable to the 30-50 nm coating thickness range recited in the claims. But, as pointed out by the Examiner, the claim requires comparability of size between the coating thickness and

the *crystallites* within the particles, not comparability between the coating thickness and the particles themselves. The Specification is silent with regard to the crystallite size within the particles. Just what relationship there is between the coating thickness and the crystallite size is not made clear by the Specification.

Appellants further cite Figure 3 as showing a 500 nm segment for comparison of the shown particles. Appellants state that “for those particles that include only one crystallite, the crystallite has a size of about 50 nm, as claimed” and “[c]rystallites having a size smaller than 50 nm are also possible in Figure 3.” (Reply Br. 5). Again, Figure 3 does not provide any indication of a relationship between the thickness of the coating and the size of the crystallites. According to the original Specification, Figure 3 shows fibers, at the surface of which is clearly distinguished a sheathing of TiO₂ particles (Specification 16:30-35). The size of the crystallites is not determinable from the figure. In the face of silence with regard to the actual crystallite sizes, conjecture with regard to the size of the crystallites fails to convey the necessary evidence of possession by Appellants at the time of the invention of the now claimed relationship between the crystallite size and the coating thickness.

Appellants further cite to *In re Smythe*, 480 F.2d 1376, 1382, 178 USPQ 279, 284 (CCPA 1973) stating that “the court emphasized consideration of what was ‘conveyed in any way to those skilled in the art’ by the originally filed application. Specifically included in consideration was what ‘would naturally occur to one skilled in the art reading the description.’” (Br. 8). However, as also emphasized by *In re Smythe*, “[e]ach case must be decided on its own facts.” *Id.* In the present case,

Appellants have not shown that it would naturally occur to one of ordinary skill in the art reading the description that the coating thickness would be comparable to the crystallite size. In fact, the particles of anatase titanium oxide are described as “probably composed of crystallite agglomerates” thereby indicating that the particles are composed of many smaller crystallites. The size relationship of the coating to these crystallites is simply not evident from the original Specification. While Appellants theorize that a particle may be made up of only two crystallites (Reply Br. 6-7), this is merely conjecture without foundation in the original Specification.

Appellants have not persuaded us of any reversible error in the Examiner’s finding. The evidence supports the Examiner’s finding of lack of written descriptive support.

CONCLUSION

In summary, the Examiner rejected claims 1-11, 13-18, 20, 21, all the claims pending in the Application, as failing to comply with the written description requirement of 35 U.S.C. § 112, ¶ 1. We affirm the decision of the Examiner.

No time period for taking any subsequent action in connection with this appeal maybe extended under 37 C.F.R. § 1.136(a)(1)(iv)(2005).

AFFIRMED

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